



**CALIFORNIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF RAIL**

**FEDERAL AID RAILROAD-HIGHWAY GRADE  
CROSSING PROGRAM**

**Section 130, Title 23, United States Code**

**PROGRAM OVERVIEW  
October 2004**

**INTRODUCTION**

The purpose of the Railroad-Highway Grade Crossing Program is to eliminate hazards to vehicles and pedestrians at existing railroad crossings. This program is authorized by Title 23, United States Code, Section 130 (23 U.S.C. 130).

**PROJECT ELIGIBILITY**

Railroad/Highway at-grade crossing improvement projects include, but are not limited to:

1. Installation and upgrade of railroad crossing warning systems
2. Installation of active advance warning signs
3. Traffic signal preemption
4. Removal of obstructions in sight triangle
5. Construction of median barriers
6. Intelligent Transportation System (ITS) improvements
7. Grade crossing closures
8. Other safety measures recommended by the California Public Utilities CPUC (CPUC) that are eligible for Federal reimbursement.

A project must satisfy the following requirements to qualify for Federal funds:

- The railroad-highway crossing must be included on the California Public Utilities CPUC “Recommended List of Public Crossings in California for Improved Crossing Protection with Federal Funding.”
- Project must be on a public road open to vehicular traffic.
- Projects (or lump sums to cover all projects) must be included in the appropriate Federal Transportation Improvement Program (FTIP) developed by a Metropolitan Planning Organization (MPO) and the Federal Statewide Transportation Improvement Program (FSTIP) approved by the Federal Highway Administration (FHWA).

Improvements to grade crossings to accommodate both existing and future commuter and intercity passenger trains shall, to the extent possible, be paid for by special funds established for creation of additional commuter and intercity passenger service and not with Section 130 funds.

Projects are evaluated under existing conditions and any projects to improve roadway capacity, such as roadway widening, will not be considered.

Section 130 funds are not available for the removal of abandoned railroad tracks.

Section 130 funds are not available to finance grade crossing surface repairs where the deteriorated condition requires maintenance. CPUC General Order 72-B establishes responsibility for grade crossing surface maintenance. General Order 72-B states, in part, that, “It shall normally be the responsibility of each railroad corporation to maintain the crossing area between lines two (2) feet outside of the rails of each track. When two or more tracks are involved, the railroad shall maintain the area between the tracks where the distance between the center lines of tracks is fifteen (15) feet or less measured at the center line of the road or highway normal to the tracks.” General Order 72-B further states, in part, “It shall ordinarily be the responsibility of the political subdivision having jurisdiction over the roadway to maintain the approaches and those portions of the crossing not included under railroad responsibility above.”

The following definitions are used to differentiate the eligibility of a project for funding because of closure and ineligibility due to abandonment:

Closure of a railroad-highway grade crossing – Closure is a condition that occurs when vehicular traffic is removed from conflict with railroad traffic at-grade through the construction of physical barriers that prevent such conflicts or the removal of the vehicular roadway, i.e., pavement from the crossing. Section 130( i ) provides for the payment of an incentive to local agencies for at-grade crossing closures. Section 130 funds will match a railroad incentive payment up to \$7,500.

Abandonment of a railroad-highway grade crossing – Abandonment is a condition that occurs when railroad traffic is removed from conflict with at-grade vehicular traffic through the cessation of all railroad operation or the removal of tracks from the crossing. Abandoned crossings are not eligible to receive Section 130 funds for their removal.

## **PROJECT SELECTION AND PROGRAMMING PROCEDURES**

Federal law (23 U.S.C. 130(d)) requires each State to develop a priority list of railroad-highway grade crossings needing improvement. CPUC staff select Section 130 crossings based on a hazard potential. CPUC staff conduct a diagnostic review for each crossing considered for funding. During the diagnostic review appropriate safety improvement recommendations will be evaluated and determined and a hazard potential will be calculated.

CPUC staff evaluate and prioritize these crossings based on factors listed in 23 U.S.C 924.9 which include the reduction in the number or severity of accidents, project cost and resources available, a hazard index formula, onsite inspection, passenger trains, school buses, transit buses, pedestrians, bicycles, hazardous material vehicles. The U.S. Department of Transportation

Accident Prediction Equation, as listed in the Railroad-Highway Grade Crossing Handbook - Second Edition, will be used as the hazard index formula. An accident history of five years will be used in the calculations.

The evaluated projects will be ranked in priority order on a list that is updated annually. CPUC staff forward the priority list to the Department.

The Department uses the priority list to develop a schedule of projects, by federal fiscal year, that it expects to be able to fund. This list is sent to the effected railroads, local agencies and planning organizations for planning and programming purposes.

Section 130 projects must be included in the FTIP developed by each Metropolitan Planning Organization and in the FSTIP in order to obtain Federal project authorization and obligation of Federal funds. The Department's Division of Transportation Programming submits a list of Section 130 projects to MPOs for inclusion in their FTIP every year, usually in January. This list includes all State managed projects scheduled for construction during the three-year FTIP period.

## **PRIORITIES FOR FUNDING APPROVED PROJECTS**

Federal law requires each State to schedule grade crossings construction projects on the basis of a hazard index. Section 130 projects are scheduled for funding in the order of their rank on the CPUC priority list. This schedule will be updated every year.

The Department will notify the railroad and local agency to advise it when a project will be funded with Section 130 funds. The railroad or local agency, or both, will be requested to send detailed cost estimates, a plan view drawing and a Federal right of way certification for their respective part of the project to the Department. The Department will use the cost estimates to develop a contract that will provide reimbursement for the work.

## **ELIGIBLE COSTS**

The Federal share payable for a project financed with Section 130 funds is 90%. Projects that are limited to the installation of active warning devices (automatic gates and cantilevered flashing lights), traffic signs, guardrails and impact attenuators, as specified in Title 23 U.S.C., Section 120 (c), may be funded up to 100%. Under certain conditions the FHWA will authorize the construction of high priority safety improvement projects, including Section 130 projects, at 100%.

Section 130( i ) provides for the payment of an incentive to local agencies for at-grade crossing closures. Crossings scheduled for closure, that are included on the CPUC priority list, are eligible to receive this payment. Section 130 funds will match a railroad incentive payment up to \$7,500 to close an at-grade crossing.

## **FEDERAL PROJECT AUTHORIZATION AND CONSTRUCTION CONTRACT**

Four documents must be completed before construction can begin. These are:

- An Authorization Agreement between the Department and the Federal Highway Administration (FHWA)
- A construction contract between the Department and the railroad/local agency
- An agreement between the Department and local agency securing any local matching funds
- A Notice to Proceed.

Work performed prior to Federal project authorization is not eligible for Federal reimbursement. Federal funds must be formally authorized (approved) by the FHWA prior to beginning reimbursable work. To satisfy this requirement the Department enters into an Authorization Agreement with the Federal Highway Administration. Authorization is normally issued when all of the conditions set forth in 23CFR635.09 are met. This includes:

- Approval of plans, specification and estimates
- Certification that Highway Relocation Assistance Program requirements have been met
- Certification that all necessary right-of-way requirements have been met
- Determination that the project is in conformance with statewide and metropolitan transportation planning requirements
- Certification that the NEPA process has been completed

The FHWA has delegated to the Department the authority make these certifications and determinations for projects that are exempt from FHWA oversight and review (per stewardship agreements between FHWA and the Department). Most Section 130 projects meet this exemption criterion. However, the FHWA still obligates the Federal funds and signs the Authorization document for all Federal-aid projects.

After the Authorization Agreement is approved by FHWA the Department will enter into a construction contract with the railroad and a matching fund agreement with the local agency if there is a local match. The construction contract will identify the costs that are eligible for reimbursement. The agreement between the Department and local agency will specify the amount of match, if any that is required. The Department sends a “Notice To Proceed” to the railroad or local agency authorizing construction as soon as the authorization requirements are met and all necessary contracts are executed. The “Notice To Proceed” is the official statement that the project has been authorized, funds have been obligated and work can commence.